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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,550	07/16/2003	Jong-Kook Kang	P-0566	5940

34610 7590 05/05/2005

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EXAMINER

SANTIAGO CORDERO, MARIVELISSE

ART UNIT PAPER NUMBER

2687

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/619,550

Applicant(s)

KANG, JONG-KOOK

Examiner

Marivelisse Santiago-Cordero

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "S5" (Fig. 2). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing-sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claims 1-9 are objected to because of the following informalities: "TE" is an acronym that could mean different things and/or change in meaning over time, hence it would be desirable to write out the actual words to which the acronym refers. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 7-8 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites the limitation "the measured information" in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation "the transmission control protocol" in the second line of the claim. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2, 6-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Satoh (Pub. No.: US 2001/0038625).

Regarding claim 1, Satoh discloses a method for measuring a service data amount (page 5, paragraph [0063]) of a terminal in a call connection networking between a TE and a network (page 1, paragraph [0006]), wherein an amount of data provided for service is measured and displayed on a screen (page 1, paragraph [0006]).

Regarding claim 2, Satoh discloses the method of claim 1 (see above), wherein the data is a data substantially provided to a user (page 3, paragraphs [0036]-[0037]).

Regarding claim 6, Satoh discloses the method of claim 1 (see above), wherein the terminal is a mobile terminal (page 1, paragraph [0006]).

Regarding claim 7, Satoh discloses the method of claim 1 (see above), wherein the measured information is stored in a non-volatile memory of the terminal (page 2, paragraph [0025]), and the stored information can be deleted or initialized by a user through a user interface (page 5, paragraphs [0027]-[0028]; note that for the terminal to display the cumulative charge in accordance with input operations of the user, it has to access, i.e., initialize, the memory).

Regarding claim 8, Satoh discloses the method of claim 7 (see above), wherein the user searches the stored information by a search function through the user interface (page 5, paragraphs [0027]-[0028]; note that the search function is inherently present in the functions of the input units, i.e., user interface, because in order for the terminal to display the cumulative charge in accordance with input operations of the user, it has to search for the information in the memory).

Regarding claim 9, Satoh discloses the method of claim 1 (see above), wherein the displayed information is accumulation of the amount of data provided for service (page 2, paragraph [0028]), and periodically updated (page 3, paragraph [0042]).

Regarding claim 10, Satoh discloses a method for measuring a service data amount (page 5, paragraph [0063]) in a call connection networking between a terminal equipment (TE) and a network (page 1, paragraph [0006]), comprising: measuring an amount of provided data when a channel for data transmission is set between the TE and the network (page 1, paragraph [0006]; page 3, paragraph [0040]); and displaying the measured amount of data on a screen of a terminal (page 1, paragraph [0006]).

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Regarding claim 11, Satoh discloses the method of claim 10 (see above), wherein the measurement of the amount of provided data is performed by the terminal (page 2, paragraphs [0023]-[0024]).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 3-4 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoh in view of Arai (Pub. No.: US 2002/0002470).

Regarding claim 3, Satoh discloses the method of claim 2 (see above). Satoh fails to disclose wherein the data is a payload of a transmission control protocol layer.

However, Arai, in a method for measuring service data amount of a terminal (page 4, paragraph [0053], 3<sup>rd</sup> sentence), discloses wherein the data is a payload of a transmission control protocol layer (page 5, paragraphs [0065], [0071]-[0074]).

It would have been obvious to one of ordinary skill in this art at the time of invention by applicant to use the data of Satoh wherein it is a payload of a transmission control protocol layer as suggested by Arai.

One of ordinary skill in this art would have been motivated to use the data wherein it is a payload of a transmission control protocol layer because this communication protocol becomes necessary to generally conduct communications (Arai: page 5, paragraph [0065]) and generally, when information is transferred, the transmission control protocol layer information is stored as a payload (Arai: page 5, paragraph [0073]).

Regarding claim 4, in the obvious combination using the transmission control protocol of Arai, Satoh discloses wherein the measurement of the data amount is performed from a point when the transmission is set to a point when every session of the TE is terminated (page 3, paragraph [0040]).

Regarding claim 12, Satoh discloses the method of claim 10 (see above). Satoh fails to disclose wherein the data is a payload of a transmission control protocol layer.

However, Arai, in a method for measuring service data amount of a terminal (page 4, paragraph [0053], 3<sup>rd</sup> sentence), discloses wherein the data is a payload of a transmission control protocol layer (page 5, paragraphs [0065], [0071]-[0074]).

It would have been obvious to one of ordinary skill in this art at the time of invention by applicant to use the data of Satoh wherein it is a payload of a transmission control protocol layer as suggested by Arai.

One of ordinary skill in this art would have been motivated to use the data wherein it is a payload of a transmission control protocol layer because this communication protocol becomes

necessary to generally conduct communications (Arai: page 5, paragraph [0065]) and generally, when information is transferred, the transmission control protocol layer information is stored as a payload (Arai: page 5, paragraph [0073]).

Regarding claim 13, Satoh discloses the method of claim 10 (see above), wherein the measurement of the data amount is performed from a point when the transmission is set to a point when every session of the TE is terminated (page 3, paragraph [0040]). Satoh fails to disclose the measurement of the data amount is performed from a point when the transmission **control protocol** is set to a point when every **protocol** session of the TE is terminated.

However, Arai, in a method for measuring service data amount of a terminal (page 4, paragraph [0053], 3<sup>rd</sup> sentence), discloses the measurement of the data amount is performed from a point when the transmission **control protocol** is set to a point when every **protocol** session of the TE is terminated (page 5, paragraphs [0065]).

It would have been obvious to one of ordinary skill in this art at the time of invention by applicant to measure the amount of data of Satoh from a point when the transmission control protocol as suggested by Arai is set to a point when every protocol session of the TE is terminated.

One of ordinary skill in this art would have been motivated to measure the amount of data from a point when the transmission control protocol is set to a point when every protocol session of the TE is terminated because it would provide a more accurate measurement of the service amount of data; hence the user wouldn't be overcharged for services he/she did not receive. In addition, the transmission control protocol becomes a communication protocol necessary to generally conduct communications (Arai: page 5, paragraph [0065]).



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10. Claims 5 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoh in view of Hiroshi (Foreign Patent Document: JP 2001-326635).

Regarding claim 5, Satoh discloses the method of claim 10 (see above). Satoh fails to disclose wherein the terminal operates a modem of the TE.

However, Hiroshi, in a method for measuring a service data amount in a connection between a TE and a network (Abstract; Fig. 1), discloses wherein the terminal operates a modem of the TE (Abstract; Fig. 1, reference 102).

It would have been obvious to one of ordinary skill in this art at the time of invention by applicant to operate the terminal of Satoh as a modem of the TE as suggested by Hiroshi.

One of ordinary skill in this art would have been motivated to operate the terminal as a modem of the TE because it would serve as a connection link between the TE and the network (Hiroshi: page 5, paragraph [0026]) for the advantage of increased versatility.

Regarding claim 14, Satoh discloses the method of claim 10 (see above). Satoh fails to disclose wherein the terminal operates a modem of the TE.

However, Hiroshi, in a method for measuring a service data amount in a connection between a TE and a network (Abstract; Fig. 1), discloses wherein the terminal operates a modem of the TE (Abstract; Fig. 1, reference 102).

It would have been obvious to one of ordinary skill in this art at the time of invention by applicant to operate the terminal of Satoh as a modem of the TE as suggested by Hiroshi for the same reasons stated above for claim 5.

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11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Raith (Patent No.: 6,493,547) discloses measurement of service amount in wireless communications systems.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marivelisse Santiago-Cordero whose telephone number is (571) 272-7839. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (703) 306-3016. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 4/26/05  
**ELISEO RAMOS-FELICIANO**  
**PATENT EXAMINER**